

COCH 85

East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (423) 420-9200 (509) 924-9200 (503) 906-9200

(541) 383-9310

24-9290 906-9210 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: BKISTOL	-					INVO	DICE TO):								TUR	NAROUN	D DEOLIE	ST in Ducin	D	*
REPORT TO: AME	KRANA	WETT	ER)		BRISTOL								TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses							
ADDRESS: AMCHITK	A ISLAT	W, AL	AS	KA												10	7 5		3 2	1	< 1
PHONE: 907-770-09	74	FAX:			75	DO.	IIII (DE)									STD.	- L	um Hydrocarl	-		
PROJECT NAME: A.M.C.	HIKA	TAX. (] P.O. N	NUMBER		FDAN	ALYSE:	<u> </u>					-	5 4	3 2	2 1	< 1	
PROJECT NUMBER: 2100	30			1		T		.0001	I	T	j T			Τ	T	ST	D. OTHI		se Specify		
SAMPLED BY:				9	9											4.77	The second second			-	
CLIENT SAMPLE	SAMPL	ING		111/2 1×5	13												T	less than standa	ard may incur R	ush Charges.	
IDENTIFICATION	DATE/T	IME	B	BEN Naph	二							. ,				MATRIX (W, S, O)	# OF CONT.	· cor	MMENTS		CA WO
1.01AMB9375L	6/14/01	1600	-	~												S	2	COL	MINICINIS		עז
2.01Amb9 30 S	6/14/01	1610	۳	~												5	2		,		
3: 01 AMB9 395L	6/14/01	1620														S	2				
	6/14/01	1632	V	~												5	2				
5.01Am B9415C	6/14/01	1640	~	-												5	2				
6.01AMB9425L	10/11/21	1650	~	~												5	2			-	
7.01 AMB9 435C	6/14/4	1700	~													5					
8.01 AMB9 445L 6	1,4/01	1705	~	~							1					5	2				
9.01 AM 89455L	6/14/01	1710	I	~					·							5	2				-
100 AMB9 465L	6/14/01	1720	~	1											_	5	2				
11.01AMB9 475L 1	6/14/01	1730	~	-					-					-		5	2	-			
12.01 AMBG 49 5L 1	10/4/01	1740	~	-				*							1	5	2				
13.01AMB9 495C 1	6/14/01	A5U	-												_	5	2			_	
14.01 AMBG 50 SL (0/14/0/	1800	~													5	2				
15.01 AM BG 5/ SC 1	0/14/01	1805			~							~	^]			5	7				
RELINQUISHED BY:	Bu	<i>C</i> ;				DATE:	4150	1	RECEIV	/ED BY:	ade	JEL J.	oll	Q 1			1			- ,	
PRINT NAME: Anne Krana. RELINQUISHED BY:	weter	FIRM:	KIC	5101			415/0		PRINT	NAME:	V-()	10	ruiz	B	rell	e FIRM:	CA			TE: 6 11 ME: () 8	5 0 NS
PRINT NAME:		FIRM:				DATE:		1	RECEIV				j						DA	141	
ADDITIONAL REMARKS:		* ********				TIME:			PRINT	NAME:						FIRM:			TIN	ЛE:	
COC REV 3/99	-						· ·	.,										TEM 5,	IP.	GE OF	2
																				01	



COC #83

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

(425) 420-9200 (509) 924-9200

X 420-9210 X 924-9290

9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310

(503) 906-9200 FAX 906-9210

FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M1 06043

CLIENT:	12			TOTA OT	1			
DEDORT TO		VOICE TO:			TURN		QUEST in Business I	Days*
ADDRESS: Anne Kranawetter Anchtka Island, Alaska		(<	Bastol			_	norganic Analyses	_,,
ADDRESS:		1)(1)10(10 7	5 4	3 2 1	< 1
PHONE:					STD.		drocarbon Analyses	
PHONE: PROJECT NAME: 770 0974 FAX: 770 6	9 - P.	O. NUMBER:	21000		5	4 3	2 1 <1	Į.
PROJECT NUMBER! And hotel		REQUES	TEDANALYSES		STD		Please Specify	
SAMPLED BY: 21090						OTHER		
Ann					*Turnarou	nd Requests less that	n standard may incur Rush Ch	harges.
					MATRIX	# OF		NCA WO
IDENTIFICATION DATE/TIME					(W, S, O)	CONT.	COMMENTS	
1							COMMENTS	ID
2 01 Am B9 52X 6/14/01 1810					S			
01An B9 53 SL 6/14/01 1915					5	- Company		
3. 01 AM 89 5451 6/14/11 1820					2	1	7	
1. OI AM B9 52X 6/14/01 18/0 2. OI AM B9 53 SL 6/14/01 18 20 4. OI AM B9 55 SL 6/14/01 18 20 5.						*		
5. UNW 19935 X C//4/01 1850								1
6.								
7.								
8.								
9.								
10.								
11.								
12.			· /					
13.								
14.								*
15.						-		
RELINQUISHED BY:								,)
PRINT NAME.	DAT	E: 6/5/0/	RECEIVED BY: Crary	Beadle 1	1	· A	DATE:	6/15/01
RELINQUISHED BY AND KORNEY FIRM: BUSH) IIIVI	E: 808	PRINT NAME:	Jera in Brad	e FIRM:	NCH	TIME:	0800
PRINT NAME: FIRM:	DAT TIM		RECEIVED BY:				DATE:	
ADDITIONAL REMARKS:	1 IIVI	ы.	PRINT NAME:		FIRM:		TIME:	
COC REV 3/99							TEMP:	2
							1 914 CPAGE	OF 2



425,420,9200 fax 425,420,9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/15/01 08:08. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

112

Work Orders included in this report:

M106043



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1 Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/19/01 14:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AM B937SL	M106043-01	Soil	06/14/01 16:00	06/15/01 08:08
01AM B938SL	M106043-02	Soil	06/14/01 16:10	06/15/01 08:08
01AM B939SL	M106043-03	Soil	06/14/01 16:20	06/15/01 08:08
01AM B940SL	M106043-04	Soil	06/14/01 16:30	06/15/01 08:08
01AM B941SL	M106043-05	Soil	06/14/01 16:40	06/15/01 08:08
01AM B942SL	M106043-06	Soil	06/14/01 16:50	06/15/01 08:08
01AM B943SL	M106043-07	Soil	06/14/01 17:00	06/15/01 08:08
01AM B944SL	M106043-08	Soil	06/14/01 17:05	06/15/01 08:08
01AM B945SL	M106043-09	Soil	06/14/01 17:10	06/15/01 08:08
01AM B946SL	M106043-10	Soil	06/14/01 17:20	06/15/01 08:08
01AM B947SL	M106043-11	Soil	06/14/01 17:30	06/15/01 08:08
01AM B948SL	M106043-12	Soil	06/14/01 17:40	06/15/01 08:08
01AM B949SL	M106043-13	Soil	06/14/01 17:50	06/15/01 08:08
01AM B950SL	M106043-14	Soil	06/14/01 18:00	06/15/01 08:08
01AM B951SL	M106043-15	Soil	06/14/01 18:05	06/15/01 08:08
01AM B952SL	M106043-16	Soil	06/14/01 18:10	06/15/01 08:08
01AM B953SL	M106043-17	Soil	06/14/01 18:15	06/15/01 08:08
01AM B954SL	M106043-18	Soil	06/14/01 18:20	06/15/01 08:08
01AM B955SL	M106043-19	Soil	06/14/01 18:30	06/15/01 08:08

C.O.C. #83

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1 Project Number: 21090

Reported: 06/19/01 14:59

Project Manager: Anne Kranawetter Anchorage, AK 99502-1116

Hydrocarbon Identification per NW-TPH Methodology North Creek Analytical - Mobile Lab

Project: Amchitka

		Reporting							
Analyte	Result	Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AM B951SL (M106043-15) Soil					Sampled: 06/1	4/01 Rece	eived: 06/15/	01	
Gasoline Range Hydrocarbons	ND	9.78	mg/kg	1	NWTPH HCID	06/15/01	06/15/01	0106049	
Diesel Range Hydrocarbons	ND	24.5	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	48.9	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	100 %	50-150							
01AM B952SL (M106043-16) Soil					Sampled: 06/1	4/01 Rece	eived: 06/15/	01	
Gasoline Range Hydrocarbons	72.5	10.2	mg/kg	1	NWTPH HCID	06/15/01	06/15/01	0106049	
Diesel Range Hydrocarbons	316	25.5	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	51.1	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	102 %	50-150							
01AM B953SL (M106043-17) Soil					Sampled: 06/1	4/01 Rece	eived: 06/15/	01	
Gasoline Range Hydrocarbons	ND	10.3	mg/kg	1	NWTPH HCID	06/15/01	06/15/01	0106049	
Diesel Range Hydrocarbons	ND	25.8	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	51.7	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	103 %	50-150							
01AM B954SL (M106043-18) Soil					Sampled: 06/1	4/01 Rece	eived: 06/15/	01	
Gasoline Range Hydrocarbons	ND	9.63	mg/kg	1	NWTPH HCID	06/15/01	06/15/01	0106049	
Diesel Range Hydrocarbons	ND	24.1	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	48.2	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	97.3 %	50-150							

North Creek Analytical - Mobile Lab



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/19/01 14:59

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AM B937SL (M106043-01) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	78.0 %	75-125							
Surr: Triacontane	104 %	75-125							
01AM B938SL (M106043-02) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	88.9 %	75-125							
Surr: Triacontane	88.2 %	75-125							
01AM B939SL (M106043-03) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	79.1 %	75-125							
Surr: Triacontane	105 %	75-125							
01AM B940SL (M106043-04) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	89.6 %	75-125							
Surr: Triacontane	90.2 %	75-125							
01AM B941SL (M106043-05) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	80.3 %	75-125							
Surr: Triacontane	108 %	75-125							
01AM B942SL (M106043-06) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	86.6 %	75-125							
Surr: Triacontane	88.6 %	75-125							

North Creek Analytical - Mobile Lab



06/19/01 14:59

425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka Reported: 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

			•						
Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AM B943SL (M106043-07) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/16/01	06/17/01	0106054	
Surr: 1-Chlorooctadecane	80.6 %	75-125							
Surr: Triacontane	115 %	75-125							
01AM B944SL (M106043-08) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	201	150	mg/kg dry	1	AK 102	06/17/01	06/17/01	0106056	
Surr: 1-Chlorooctadecane	61.6 %	50-150							
Surr: Triacontane	95.4 %	50-150							
01AM B945SL (M106043-09) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/17/01	06/17/01	0106056	
Surr: 1-Chlorooctadecane	72.1 %	50-150							
Surr: Triacontane	94.3 %	50-150							
01AM B946SL (M106043-10) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/17/01	06/17/01	0106056	
Surr: 1-Chlorooctadecane	81.8 %	50-150							
Surr: Triacontane	90.5 %	50-150							
01AM B947SL (M106043-11RE1) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/18/01	06/18/01	0106063	
Surr: 1-Chlorooctadecane	67.4 %	50-150							
Surr: Triacontane	126 %	50-150							
01AM B948SL (M106043-12RE1) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/18/01	06/18/01	0106063	
Surr: 1-Chlorooctadecane	59.9 %	50-150							
Surr: Triacontane	126 %	50-150							

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 06/19/01 14:59

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AM B949SL (M106043-13) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	284	150	mg/kg dry	1	AK 102	06/17/01	06/17/01	0106056	
Surr: 1-Chlorooctadecane Surr: Triacontane	55.8 % 98.1 %	50-150 50-150							
01AM B950SL (M106043-14RE1) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/18/01	06/18/01	0106063	
Surr: 1-Chlorooctadecane Surr: Triacontane	72.2 % 130 %	50-150 50-150							

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Reported: 06/19/01 14:59

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AM B937SL (M106043-01) Soil					Sampled: 06/	14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0855	mg/kg dry	50	!1B BTEX/MT	1 06/17/01	06/17/01	0106059	
Toluene	ND	0.342	"	"	"	"	"	"	
Ethylbenzene	ND	0.342	"	"	"	"	"	"	
Xylenes (total)	ND	0.684	"	"	"	"	"	"	
Naphthalene	ND	3.42	"	"	"	"	"	"	
Surr: 4-BFB	78.4 %	50-150							
01AM B938SL (M106043-02) Soil					Sampled: 06/	14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0832	mg/kg dry	50	!1B BTEX/MT	1 06/17/01	06/17/01	0106059	
Toluene	ND	0.333	"	"	"	"	"	"	
Ethylbenzene	ND	0.333	"	"	"	"	"	"	
Xylenes (total)	ND	0.666	"	"	"	"	"	"	
Naphthalene	ND	3.33	"	"	"	"	"	"	
Surr: 4-BFB	76.9 %	50-150							
01AM B939SL (M106043-03) Soil					Sampled: 06/	14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0641	mg/kg dry	50	!1B BTEX/MT	1 06/17/01	06/17/01	0106059	
Toluene	ND	0.256	"	"	"	"	"	"	
Ethylbenzene	ND	0.256	"	"	"	"	"	"	
Xylenes (total)	ND	0.513	"	"	"	"	"	"	
Naphthalene	ND	2.56	"	"	"	"	"	"	
Surr: 4-BFB	76.7 %	50-150							
01AM B940SL (M106043-04) Soil					Sampled: 06/	14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0672	mg/kg dry	50	!1B BTEX/MT	1 06/17/01	06/17/01	0106059	
Toluene	ND	0.269	"	"	"	"	"	"	
Ethylbenzene	ND	0.269	"	"	"	"	"	"	
Xylenes (total)	ND	0.538	"	"	"	"	"	"	
Naphthalene	ND	2.69	"	"	"	"	"	"	
Surr: 4-BFB	77.7 %	50-150							

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

06/19/01 14:59

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AM B941SL (M106043-05) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0715	mg/kg dry	50	!1B BTEX/M	TI 06/17/01	06/17/01	0106059	
Toluene	ND	0.286	"	"	"	"	"	"	
Ethylbenzene	ND	0.286	"	"	"	"	"	"	
Xylenes (total)	ND	0.572	"	"	"	"	"	"	
Naphthalene	ND	2.86	"	"	"	"	"	"	
Surr: 4-BFB	77.3 %	50-150							
01AM B942SL (M106043-06) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0791	mg/kg dry	50	!1B BTEX/MT	ΓI 06/17/01	06/17/01	0106059	
Toluene	ND	0.317	"	"	"	"	"	"	
Ethylbenzene	ND	0.317	"	"	"	"	"	"	
Xylenes (total)	ND	0.633	"	"	"	"	"	"	
Naphthalene	ND	3.17	"	"	"	"	"	"	
Surr: 4-BFB	84.8 %	50-150							
01AM B943SL (M106043-07) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0596	mg/kg dry	50	!1B BTEX/MT	ΓΙ 06/17/01	06/17/01	0106059	
Toluene	ND	0.239	"	"	"	"	"	"	
Ethylbenzene	ND	0.239	"	"	"	"	"	"	
Xylenes (total)	ND	0.477	"	"	"	"	"	"	
Naphthalene	ND	2.39	"	"	"	"	"	"	
Surr: 4-BFB	73.8 %	50-150							
01AM B944SL (M106043-08) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0545	mg/kg dry	50	!1B BTEX/MT	Π 06/17/01	06/17/01	0106059	
Toluene	ND	0.218	"	"	"	"	"	"	
Ethylbenzene	ND	0.218	"	"	"	"	"	"	
Xylenes (total)	ND	0.436	"	"	"	"	"	"	
Naphthalene	ND	2.18	"	"	"	"	"	"	
Surr: 4-BFB	85.6 %	50-150							

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1 Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/19/01 14:59

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AM B945SL (M106043-09) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0740	mg/kg dry	50	!1B BTEX/M	ΓΙ 06/17/01	06/17/01	0106059	
Toluene	ND	0.296	"	"	"	"	"	"	
Ethylbenzene	ND	0.296	"	"	"	"	"	"	
Xylenes (total)	ND	0.592	"	"	"	"	"	"	
Naphthalene	ND	2.96	"	"	"	"	"	"	
Surr: 4-BFB	78.7 %	50-150							
01AM B946SL (M106043-10) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0657	mg/kg dry	50	!1B BTEX/MT	ГІ 06/17/01	06/17/01	0106059	
Toluene	ND	0.263	"	"	"	"	"	"	
Ethylbenzene	ND	0.263	"	"	"	"	"	"	
Xylenes (total)	ND	0.526	"	"	"	"	"	"	
Naphthalene	ND	2.63	"	"	"	"	"	"	
Surr: 4-BFB	75.1 %	50-150							
01AM B947SL (M106043-11) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0756	mg/kg dry	50	!1B BTEX/M	ΓΙ 06/17/01	06/17/01	0106059	
Toluene	ND	0.302	"	"	"	"	"	"	
Ethylbenzene	ND	0.302	"	"	"	"	**	"	
Xylenes (total)	ND	0.604	"	"	"	"	"	"	
Naphthalene	ND	3.02	"	"	"	"	"	"	
Surr: 4-BFB	78.3 %	50-150							
01AM B948SL (M106043-12) Soil					Sampled: 06	/14/01 Rece	eived: 06/15/	01	
Benzene	ND	0.0717	mg/kg dry	50	!1B BTEX/MT	ГІ 06/17/01	06/17/01	0106059	
Toluene	ND	0.287	"	"	"	"	"	"	
Ethylbenzene	ND	0.287	"	"	"	"	"	"	
Xylenes (total)	ND	0.574	"	"	"	"	"	"	
Naphthalene	ND	2.87	"	"	"	"	"	"	
Surr: 4-BFB	74.0 %	50-150							

North Creek Analytical - Mobile Lab



Reported:

425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 06/19/01 14:59

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

		inary tree						
D Iv	Reporting	TT	D'I d'an	Madel	D	A11	D. c. l	N
Kesult	Limit	Units	Dilution	Method	Prepared	Anaiyzed	ватсп	Notes
				Sampled: 06/	14/01 Rece	ived: 06/15/	01	
ND	0.0585	mg/kg dry	50	!1B BTEX/MT	Π 06/17/01	06/17/01	0106059	
ND	0.234	"	"	"	"	"	"	
ND	0.234	"	"	"	"	"	"	
ND	0.468	"	"	"	"	"	"	
ND	2.34	"	"	"	"	"	"	
95.6 %	50-150							
				Sampled: 06/	/14/01 Rece	ived: 06/15/	01	
ND	0.0708	mg/kg dry	50	!1B BTEX/MT	Π 06/17/01	06/18/01	0106059	
ND	0.283	"	"	"	"	"	"	
ND	0.283	"	"	"	"	"	"	
ND	0.567	"	"	"	"	"	"	
ND	2.83	"	"	"	"	"	"	
82.3 %	50-150							
				Sampled: 06/	/14/01 Rece	ived: 06/15/	01	
ND	0.147	mg/kg dry	50	!1B BTEX/MT	Π 06/17/01	06/18/01	0106059	
ND	0.590	"	"	"	"	"	"	
ND	0.590	"	"	"	"	"	"	
ND	1.18	"	"	"	"	"	"	
ND	5.90	"	"	"	"	"	"	
91.8 %	50-150							
	ND ND ND 95.6 % ND	ND	ND	ND	Result Limit Units Dilution Method	Result Limit Units Dilution Method Prepared	Result Limit Units Dilution Method Prepared Analyzed	ND

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

06/19/01 14:59

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Dilution	Method F	Prepared	Analyzed	Batch	Notes
01AM B937SL (M106043-01) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	88.0	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B938SL (M106043-02) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	81.5	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B939SL (M106043-03) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	76.5	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B940SL (M106043-04) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	75.3	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B941SL (M106043-05) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	71.6	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B942SL (M106043-06) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	77.8	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B943SL (M106043-07) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	77.9	0.0100 % by Weight	1	Gravimetric 0	6/16/01	06/17/01	0106055	
01AM B944SL (M106043-08) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	82.6	0.0100 % by Weight	1	Gravimetric 0	6/17/01	06/18/01	0106057	
01AM B945SL (M106043-09) Soil				Sampled: 06/14/0	01 Rece	eived: 06/15/	01	
% Solids	78.6	0.0100 % by Weight	1	Gravimetric 0	6/17/01	06/18/01	0106057	

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/19/01 14:59

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analysta	Dogult	Reporting	Dilutio-	Mathad P	ad Analyzz-J	Datah N-+
Analyte	Result	Limit Units	Dilution	Method Prepar	ed Analyzed	Batch Notes
01AM B946SL (M106043-10) Soil				Sampled: 06/14/01 F	Received: 06/15/0	1
% Solids	78.6	0.0100 % by Weight	1	Gravimetric 06/17/0	06/18/01	0106057
01AM B947SL (M106043-11) Soil				Sampled: 06/14/01 F	Received: 06/15/0	1
% Solids	84.9	0.0100 % by Weight	1	Gravimetric 06/17/0	06/18/01	0106057
01AM B948SL (M106043-12) Soil				Sampled: 06/14/01 F	Received: 06/15/0	1
% Solids	85.8	0.0100 % by Weight	1	Gravimetric 06/17/0	06/18/01	0106057
01AM B949SL (M106043-13) Soil				Sampled: 06/14/01 F	Received: 06/15/0	1
% Solids	88.4	0.0100 % by Weight	1	Gravimetric 06/17/0	06/18/01	0106057
01AM B950SL (M106043-14) Soil				Sampled: 06/14/01 F	Received: 06/15/0	1
% Solids	82.4	0.0100 % by Weight	1	Gravimetric 06/17/0	06/18/01	0106057
01AM B955SL (M106043-19) Soil				Sampled: 06/14/01 F	Received: 06/15/0	1
% Solids	100	0.0100 % by Weight	1	Gravimetric 06/17/0	06/18/01	0106057

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 06/19/01 14:59

Hydrocarbon Identification per NW-TPH Methodology - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	l

Batch 0106049 - TPH-HCID (WA)

Blank (0106049-BLK1)				Prepared &	Analyzed: 06/15/0	01
Gasoline Range Hydrocarbons	ND	10.0	mg/kg			
Diesel Range Hydrocarbons	ND	25.0	"			
Heavy Oil Range Hydrocarbons	ND	50.0	"			
Surr: 1-Chlorooctadecane	9.82		"	10.0	98.2	50-150

North Creek Analytical - Mobile Lab



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509 924 9200 fax 509 924 9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 06/19/01 14:59

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab Reporting Spike %REC RPD Source Analyte Result Limit Units Level Result %REC Limits RPD Limit Notes Batch 0106054 - 3545 ASE Blank (0106054-BLK1) Prepared: 06/16/01 Analyzed: 06/17/01 Diesel Range Organics ND 150 mg/kg wet Surr: 1-Chlorooctadecane 22.4 23.4 95.7 75-125 Surr: Triacontane 21.8 23.4 93.2 75-125 LCS (0106054-BS1) Prepared: 06/16/01 Analyzed: 06/17/01 150 mg/kg wet Diesel Range Organics 959 1250 76.7 75-125 109 Surr: 1-Chlorooctadecane 25.6 23.4 75-125 Surr: Triacontane 24.1 23.4 103 75-125 LCS Dup (0106054-BSD1) Prepared: 06/16/01 Analyzed: 06/17/01 Diesel Range Organics 969 150 mg/kg wet 1250 77.5 75-125 1.04 Surr: 1-Chlorooctadecane 25.4 23.4 109 75-125 24.9 Surr: Triacontane 23.4 106 75-125 Matrix Spike (0106054-MS1) Prepared: 06/16/01 Analyzed: 06/17/01 Source: M106040-01 Diesel Range Organics 3360 150 mg/kg dry 3940 467 73.4 60-140 Surr: 1-Chlorooctadecane 62.0 73.8 84.0 75-125 Surr: Triacontane 76.8 73.8 104 75-125 Batch 0106056 - 3545 ASE Blank (0106056-BLK1) Prepared & Analyzed: 06/17/01 ND 150 mg/kg wet Diesel Range Organics Surr: 1-Chlorooctadecane 19.2 23.4 82.1 50-150 83.8 Surr: Triacontane 19.6 23.4 50-150 LCS (0106056-BS1) Prepared & Analyzed: 06/17/01 Diesel Range Organics 952 150 mg/kg wet 1250 76.2 75-125

23.4

23.4

North Creek Analytical - Mobile Lab

Surr: 1-Chlorooctadecane

Surr: Triacontane

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its

50-150

50-150

96.2

110

22.5

25.8



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported: 06/19/01 14:59

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab Reporting Spike %REC RPD Source Limit %REC RPD Result Units Level Result Limits Limit Notes

1250

32.2

Prepared & Analyzed: 06/17/01

75.3

107

1.16

75-125

50-150

20

Batch 0106056 - 3545 ASE LCS Dup (0106056-BSD1)

Diesel Range Organics

Surr: Triacontane

Analyte

8 8		2 2					
Surr: 1-Chlorooctadecane	20.9	"	23.4		89.3	50-150	
Surr: Triacontane	24.5	"	23.4		105	50-150	
Matrix Spike (0106056-MS1)	Sour	Source: M106050-01			zed: 06/1	7/01	
Diesel Range Organics	1440	150 mg/kg dry	1720	336	64.2	60-140	
Surr: 1-Chlorooctadecane	30.2	"	32.2		93.8	50-150	

150 mg/kg wet

941

34.6

Batch 0106063 - 3545 ASE

Daten 0100003 - 3343 ASE								
Blank (0106063-BLK1)			Prepared &	Analyzed: 06/1	8/01			
Diesel Range Organics	ND	150 mg/kg wet						
Surr: 1-Chlorooctadecane	21.7	"	23.4	92.7	50-150			
Surr: Triacontane	21.0	"	23.4	89.7	50-150			
LCS (0106063-BS1)			Prepared &	Analyzed: 06/1	8/01			
Diesel Range Organics	1370	150 mg/kg wet	1250	110	75-125			
Surr: 1-Chlorooctadecane	24.8	"	23.4	106	50-150			
Surr: Triacontane	22.5	"	23.4	96.2	50-150			
LCS Dup (0106063-BSD1)			Prepared &	Analyzed: 06/1	8/01			
Diesel Range Organics	1460	150 mg/kg wet	1250	117	75-125	6.36	20	
Surr: 1-Chlorooctadecane	25.9	"	23.4	111	50-150			
Surr: Triacontane	23.6	"	23.4	101	50-150			

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/19/01 14:59

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	ĺ

Batch 0106059 - MeOH Extraction	n				
Blank (0106059-BLK1)			Prepared &	Analyzed: 06/17/01	
Benzene	ND	0.0250 mg/kg wet			
Toluene	ND	0.100 "			
Ethylbenzene	ND	0.100 "			
Xylenes (total)	ND	0.200 "			
Naphthalene	ND	1.00 "			
Surr: 4-BFB	2.22	"	2.50	88.8 50-150	
LCS (0106059-BS1)			Prepared &	Analyzed: 06/17/01	
Benzene	2.06	0.0250 mg/kg wet	2.50	82.4 69-138	
Toluene	2.09	0.100 "	2.50	83.6 53-151	
Ethylbenzene	2.25	0.100 "	2.50	90.0 61-141	
Xylenes (total)	6.40	0.200 "	7.50	85.3 62-141	
Naphthalene	3.11	1.00 "	2.50	124 65-135	
Surr: 4-BFB	2.31	"	2.50	92.4 50-150	

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

Reported:

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 06/19/01 14:59

Notes and Definitions

DET Analyte DETECTED

Anchorage, AK 99502-1116

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from:
			\\sisters\elmnt\Report\M106043 FINAL 06 19 01
			1459.mdb
			Default Report (not modified)